

Compliance Report – Eton Range Realignment Project, May 2021

EPBC Approval 2015/7552

May 2020 - April 2021



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Departmental approvals

Refer to the appropriate Risk Assessment Tool for relevant reviewer and approver

Date	Name	Position	Action required (Review/endorse/approve)
25/05/2021	Tim Dalton	Senior Environmental Officer (Contractor)	Document for Review and Approval
	Patrick Aprile	District Director (Mackay/Whitsunday)	Approve

Prepared by	Tim Dalton
Title	Senior Environmental Officer (Contractor)
District & Region	Mackay/Whitsunday
Branch & Division	PDO
Project/program	Eton Range Realignment Project
Project number	242/33B/8
Project location	Mackay Regional Council
Status	Revision 1
DMS	450/642

Proponent and Approved Action

Detail	Applicable details
EPBC Reference Number:	2015/7552
Project Name:	Eton Range Realignment Project
Proponent:	Department of Transport and Main Roads
ABN:	39 407 690 291
Proposed Action:	To realign the Peak Downs Highway at Eton Range between Mackay and Nebo, Queensland
Reporting Period:	May 2020 – April 2021
Date Prepared:	May 2021

Declaration of Accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed



Full name

Patrick Aprile

Position

District Director (Mackay/Whitsunday District)

Organisation

Department of Transport and Main Roads (ABN - 39 407 690 291)

Date

31/05/2021

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1. Introduction

The Department of Transport and Main Roads (TMR) has recently completed the construction of the Eton Range Realignment Project (herein referred to as 'the Project'). TMR submitted a referral for the Project to the former federal Department of the Environment (now Department of the Agriculture, Water and the Environment, DAWE) for impacts to matters of national environmental significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 27 August 2015.

In September 2015 DoE determined the Project a controlled action under the EPBC Act due to potential significant impacts MNES protected under Section 18 and 18A, Part 3 of the EPBC Act. In March 2016 DoE granted the Project approval with conditions. Construction commenced on the 4 April 2016.

Condition 16 of the approval requires that TMR prepares and publishes an annual report that assesses compliance with each of the conditions of the approval. This report is prepared for the period from May 2020 - April 2021.

2. Description of Activity

2.1 Project location

The Project is located approximately 35km south west of Mackay on the Peak Downs Highway. The Peak Downs Highway is part of the State Strategic Road Network in recognition of its importance to the economy of both Mackay and Queensland. The highway is part of the Emerald to Mackay freight corridor supporting the mining and agricultural industries of the Bowen and Galilee Basins (refer to Figure 1). The Eton Range is the main transport corridor across the Clarke – Connors Range.

2.2 Description of the Project

Key elements of the Project included the following:

- Sequential clearing of vegetation and ground preparation works to accommodate construction activities;
- Installation of drainage infrastructure including new culverts ranging in size from 1/600RCP to 3/2100RCP, as well as a culvert specifically for use as a fauna passage;
- General bulk earthworks which include approximately 400,000m³ of road excavation and 280,000 m² of road embankment;
- Installation of complex longitudinal drainage systems in the centre median ranging in size from 1/450 RCP to 1/1500RCP, approximately 1 km long, with numerous branch pits and grated inlet pits;
- Excavation and concrete lining of an elaborate surface catch and batter drainage system to intercept and direct overland flow to controlled outlet points, over 3200 m³ of reinforced concrete;
- Rehabilitation of approximately 950 m of existing roadway;
- Installation of an elaborate barrier system which includes w-beam, thriebeam and concrete barriers and other road furniture including road signs; and
- 6.4 hectares of landscaping/revegetation works, with approximately 4 hectares of 1:1 slope to stabilise and vegetate.

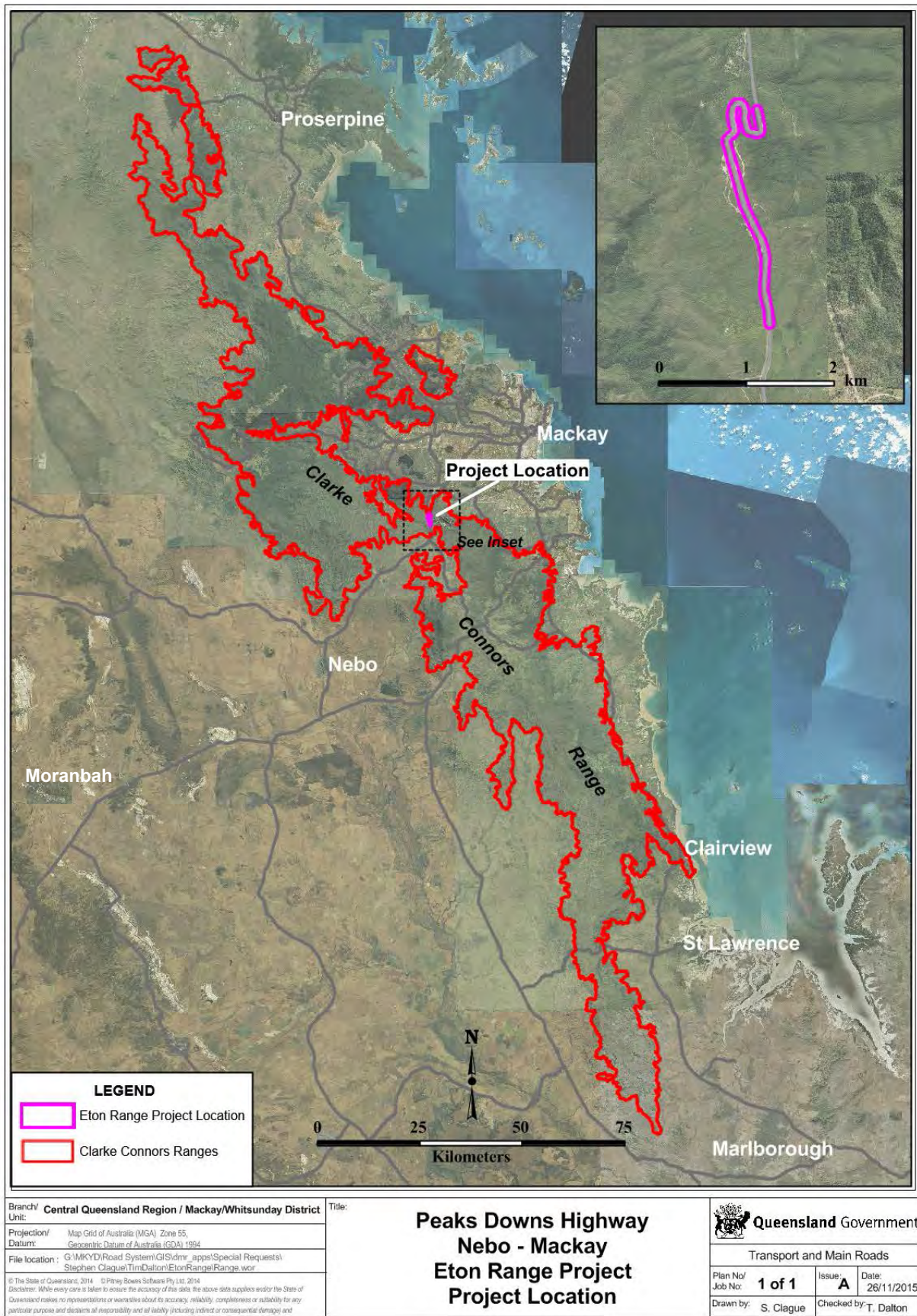


Figure 1: Project Locality

2.3 Project progress

Project progress between May 2020 and April 2021 included:

- All of drainage structures completed;
- Completion of all temporary and permanent stabilisation works;
- 100% of kerbing completed (1200m completed during this time);
- Completion of permanent fauna exclusion fencing;
- All permanent landscaping works completed;
- All reinforced embankment construction works completed;
- All hand placed concrete works completed;
- All cast in situ barrier construction works completed;
- All extruded barrier works completed;
- 40% of electrical and ITS works completed during this time (overall 100%);
- 30% pavement works (Cement Treated Base application) completed during this time (overall 100%);
- 33,000m³ concrete placed;
- Commenced fauna monitoring of the Eton Range fauna underpass; and
- Rest stop area on the top of the range has been opened for the public

Upcoming significant project milestones include:

- Completion of fauna underpass monitoring in late 2021;
- Completion of additional clearing along fauna exclusion fence lines; and
- Minor road sign and rest area facility upgrades

2.4 Matters of national environmental significance (MNES)

The Project was assessed as having the potential to have a significant impact on the following MNES:

- Koala (*Phascolarctos cinereus*).

3. Compliance with Approval Conditions

Table 1 provides details of the compliance with the Project’s EPBC Act approval conditions during the reporting period.

Table 1 Compliance with EPBC Approval

Condition number	Condition	Compliance				Evidence/comments/notable events
		Compliant	Observation	Non-Compliant	Non-Applicable	
1	During construction , there must be no koala mortality attributable to construction activity .	✓	✓			<p>No koala fatalities have occurred during clearing or project related activities.</p> <p>No koala fatalities occurred on the Peak Downs Highway within the confines of the project during the reporting period.</p> <p>A koala was identified within a potentially dangerous location within site in June 2020. After consultation with the Department of Environment and Science, a trap was set up and the animal was captured and released outside the project extent the following morning.</p> <p>In September 2020 Fauna Rescue Whitsundays attended site after receiving a call from a truck driver that a koala was on the active carriageway between the upper and lower hairpin. The koala was successfully caught and then released well away for the project site. A subsequent investigation identified that a pedestrian gate was the likely location where the koala accessed the road alignment. Changes were subsequently made to the pedestrian gate design to make them more effective.</p> <p>It is expected that vegetation overhanging project fauna exclusion fencing has also contributed to the continued sightings of koalas within the project extent. Maintenance of the fencelines is scheduled to be undertaken in June 2021.</p>
2	The approval holder must not clear koala habitat outside the project clearing limits shown in the clearance plans at Appendix 1.	✓				<p>Outstanding clearing is limited to the removal of vegetation with 5m of fauna exclusion fence lines. The clearing was approved in the <i>Variation of Conditions Attached to Approval</i> dated 24/08/2020. This work is scheduled to be undertaken in June 2021.</p>
3	For the ongoing protection of the koala in the project area , the approval holder must design, construct and implement koala protection measures, including fencing and a fauna underpass, prior to completion . These protection measures must be maintained by the approval holder for the life of approval .	✓				<p>Construction on the dedicated fauna underpass and the associated fauna fencing has been completed. Vegetation maintenance works along the Project’s fencelines will be undertaken in June 2021.</p>

Condition number	Condition	Compliance				Evidence/comments/notable events
		Compliant	Observation	Non-Compliant	Non-Applicable	
4	To inform adaptive management after completion , the approval holder must monitor the use of the fauna underpass and road kill within the project area , sufficient to assess the level of koala mortality from road strike and the ability of koalas to safely cross the Peak Downs Highway within the project area .	✓				<p>Monitoring of the fauna underpass and roadkill within the project area has commenced. This work is being undertaken during two successional koala breeding seasons (2020 and 2021) to determine the effectiveness of the infrastructure at providing safe passage for koalas.</p> <p>Monitoring during 2020 was undertaken over a 4 (four) week period in November/December. The monitoring identified a total of 257 fauna interactions, recorded by sandplot (trace) evidence or by camera (direct) behaviour. Of these interactions, at least 40 demonstrated the use of culverts as a thoroughfare by 7 confirmed species and up to 13 additional species that were too cryptic to be identified to species level. Koalas were caught in camera traps and their prints detected in sandplots. Although so far there is no direct evidence that koalas are using the culverts, there is evidence of koalas travelling along the fence boundary searching for a crossing.</p>
5	For the duration of the monitoring undertaken under Condition 4, the approval holder must publish the results of the monitoring for koala at least annually on the approval holder's website.	✓				<p>See above for the annual update of the Eton Range fauna underpass monitoring works.</p> <p>The full results of the underpass monitoring will be provided on TMR's website once the program is completed in late 2021.</p>

Condition number	Condition	Compliance				Evidence/comments/notable events
		Compliant	Observation	Non-Compliant	Non-Applicable	
6	<p>To compensate for residual impacts to the koala, the approval holder must within two years of commencement, provide a financial contribution of not less than \$270,942 for research and research related work by suitably qualified experts that will contribute to the better protection and long term conservation of the koala. The research and research related work must include, but is not limited to:</p> <p>a. The provision of \$47,300 to study koala population management units across the Clarke-Connors Range.</p> <p>b. The provision of \$64,468 to undertake landscape analysis and modelling to predict future koala road-kill hotspots along the Nebo stretch of the Peak Downs Highway.</p> <p>c. The provision of \$138,014 to study koala habitat use and movement patterns in the vicinity of the Eton-Nebo stretch of the Peak Downs Highway.</p> <p>d. The provision of \$21,160 for investment planning for the installation of wildlife barriers and underpasses on the Peak Downs Highway between Eton and Nebo.</p>	✓				<p>Research and research related work commenced on the 21st July 2016. On ground surveys began in August 2016 and were completed in September 2018. TMR received the drafted koala research reports from CQ University in November 2018. The final CQ University invoice was processed upon receipt of these drafted reports. A total of \$287,442.00 was provided to CQ University for the research project.</p>
7	<p>Within six months of commencement, the approval holder must provide to the Department a time-line of the proposed expenditure on research and research related work described in Condition 6.</p>	✓				<p>The time-line of proposed expenditure was provided to DoE on the 16th June 2016.</p>
8	<p>During the conduct of the research and research related work, progress must be reported to the Department annually and published on the approval holder's website.</p>	✓				<p>Research commenced in July 2016. The first annual report was published in July 2017. No summary report was published after the completion of the second and final year of the research as the data was to be shortly included in the published reports.</p>

Condition number	Condition	Compliance				Evidence/comments/notable events
		Compliant	Observation	Non-Compliant	Non-Applicable	
9	The approval holder must provide the results of the research and research related work to the Department and publish a summary of the results of the research on the approval holder's website within 12 months of the completion of the research. The summary of the results of the research must remain on the approval holder's website for the life of approval .	✓				Data collection and on ground surveys were completed in September 2018. Drafted reports were provided to TMR for review in November 2018. Finalised reports were submitted to TMR in March 2019 (which is considered formal completion of the research). The reports were distributed to stakeholders and uploaded to TMR's website in April 2019 Eton Range Realignment Project Department of Transport and Main Roads (tmr.qld.gov.au)
10	The research described under Condition 6 must be peer reviewed.	✓				The research has been split up into individual publications all of which will be submitted for peer reviewed. The first of the publications has been submitted for peer review. 'Schlagloth, R.; Melzer, A.; Santamaria, F.; Harte, M.; Houston, W. & Keatley, M.R. (submitted). Applying a conceptual koala road-kill model to predict hotspots along a highway in the Central Queensland's Clarke-Connors Range. <i>European Journal of Wildlife Research</i> .' The two final reports related to the research will shortly be submitted.
11	To compensate for residual impacts to the koala , the approval holder must, within 12 months of the research being completed, expend not less than \$200,000 in applying the findings of the research and research related work described under Condition 6 by designing, constructing, and implementing wildlife protection and/or diversion infrastructure on existing parts of the Peak Downs Highway between Eton and Nebo.	✓				In excess of \$200,000 has now been spent at Denison and Stockyard Creek to address two of the priority hotspot locations identified in the research undertaken as per Condition 6. A formal letter was provided to the Department on the 31/08/2020 advising of this.

Condition number	Condition	Compliance				Evidence/comments/notable events
		Compliant	Observation	Non-Compliant	Non-Applicable	
12	Within 12 months of expending funds to design, construct and implement wildlife protection and/or diversion infrastructure as described under Condition 11, the approval holder must provide to the Department and publish on the approval holder's website, a report on the nature of the wildlife protection and/or diversion infrastructure funded and a plan for monitoring and assessing the effectiveness of this infrastructure in delivering a conservation gain for the koala. The published report must remain on the approval holder's website for the life of approval.	✓				<p>The Wildlife Protection - Monitoring and Assessment Plan was provided to DAWE on the 10/02/2020. The report was also distributed to stakeholders and uploaded to TMR's website.</p> <p>Eton Range Realignment Project Department of Transport and Main Roads (tmr.qld.gov.au)</p>
13	Within six months of the conclusion of monitoring activity under the plan described under Condition 12, the approval holder must provide to the Department and publish on the approval holder's website, a report on the outcomes of the monitoring and assessment in delivering conservation gain (if any) for the koala. The published report must remain on the approval holder's website for the life of approval.	✓		✓		<p>Monitoring activities at Stockyard and Denison Creek were completed in December 2020. Successful crossings of koalas occurred at the Denison Creek underpass. Based on the data, in excess of 80 crossings are expected each breeding season at Denison Creek. Koala activity was also observed at the nearby Stockyard Creek underpass. Refer to Figures 13 – 15.</p> <p>Overall, the infrastructure was shown to be effective at funnelling koalas away from the road towards the safety of the underpass. It was also determined the infrastructure assisted in preventing or reducing koala deaths.</p> <p>The monitoring report was provided to the Department via email on the 20/01/2021.</p> <p>The monitoring report has yet to be uploaded to the project website. It is expected that the report will be uploaded to the project website in the coming weeks.</p>
14	Within 20 days after the commencement of construction, the proponent must advise the Department in writing of the actual date of commencement of construction.	✓				<p>TMR advised DAWE on the 4th April 2016 of the date of construction commencement.</p>

Condition number	Condition	Compliance				Evidence/comments/notable events
		Compliant	Observation	Non-Compliant	Non-Applicable	
15	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	✓				The Eton Range Project is now completed. Accurate records substantiating all activities associated with or relevant to the conditions of approval are available upon request.
16	Within three months of every 12 month anniversary of the commencement of construction, the approval holder must publish a report on their website addressing compliance with each of the conditions of this approval over the previous 12 months. The published report must remain on the approval holder's website for the life of approval. Non-compliance with any of the conditions of this approval must be reported to the Department at the same time as the compliance report is published.	✓				This report is the fifth compliance report for the Project and will be published on TMR's website.
17	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.				✓	To date, there has been no direction from the Minister to complete an independent audit.
18	If, at any time after five years from the date of this approval, the approval holder has not commenced construction, then the approval holder must not commence construction without the written agreement of the Minister.	✓				The Project commenced on the 4 th April 2016.

4. Site Photos



Figure 1: Lower hairpin



Figure 2: Rest area



Figure 3: Split carriageway (looking uphill)



Figure 4: Upper hairpin



Figure 5: Rest area pathway



Figure 6: Reinforced earth embankment vegetation growing behind barrier



Figure 7: Koala sensitive infrastructure after landscaping activities



Figure 8: Landscaping treatment near old safety ramp



Figure 9: MC001 open to traffic



Figure 10: Looking uphill towards upper hairpin



Figure 11: MC002 Asphalt placement



Figure 12: Cemented treated base construction

5. Monitoring Photos – Denison and Stockyard Creek



Figure 13: Koala utilising Denison Creek underpass



Figure 14: Koala at Stockyard Creek underpass



Figure 15: Koala prints in sand plots

